

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/523,689A
Source: IFWP
Date Processed by STIC: 7/11/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:14

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

3 <110> APPLICANT: Masateru YAMADA
 4 Hajimu KURUMATANI
 5 Tetsuo SUDO
 7 <120> TITLE OF INVENTION: REMEDY OR PREVENTIVE FOR KIDNEY DISEASE AND METHOD OF
 DIAGNOSING KIDNEY
 8 DISEASE
 10 <130> FILE REFERENCE: 0760-0343PUS1
 12 <140> CURRENT APPLICATION NUMBER: US 10/523,689A
 13 <141> CURRENT FILING DATE: 2005-02-03
 15 <160> NUMBER OF SEQ ID NOS: 28
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 21
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Artificial Sequence
 22 <220> FEATURE:
 23 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
 kinase 2
 24 subunit gene
 26 <400> SEQUENCE: 1
 27 gtaatcatct tgattacccc a 21
 29 <210> SEQ ID NO: 2
 30 <211> LENGTH: 21
 31 <212> TYPE: DNA
 32 <213> ORGANISM: Artificial Sequence
 34 <220> FEATURE:
 35 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
 kinase 2
 36 subunit gene
 38 <400> SEQUENCE: 2
 39 gggtggccgg ccgcttgggc c 21
 41 <210> SEQ ID NO: 3
 42 <211> LENGTH: 20
 43 <212> TYPE: DNA
 44 <213> ORGANISM: Artificial Sequence
 46 <220> FEATURE:
 47 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
 kinase 2
 48 subunit gene
 50 <400> SEQUENCE: 3
 51 ttcaaatacc aaagctgggtg 20
 53 <210> SEQ ID NO: 4
 54 <211> LENGTH: 20
 55 <212> TYPE: DNA
 56 <213> ORGANISM: Artificial Sequence

58 <220> FEATURE:
59 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
60 subunit gene

RAW SEQUENCE LISTING

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:14

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

```

62 <400> SEQUENCE: 4
63 atcaaagtct gtcaggatct                                20
65 <210> SEQ ID NO: 5
66 <211> LENGTH: 20
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
72      subunit gene
74 <400> SEQUENCE: 5
75 tggataaagt tttcccagcg                                20
77 <210> SEQ ID NO: 6
78 <211> LENGTH: 21
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
84      subunit gene
86 <400> SEQUENCE: 6
87 accaagtttt cgaacccagt t                                21
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
96      subunit gene
98 <400> SEQUENCE: 7
99 ctgctcatct tgacgtcagc                                20
101 <210> SEQ ID NO: 8
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
108      subunit gene
110 <400> SEQUENCE: 8
111 ctcagagcta aagcctcgtg                                20
113 <210> SEQ ID NO: 9
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
120      subunit gene
122 <400> SEQUENCE: 9
123 acccgaccgc ggcaggcgaa                                20
125 <210> SEQ ID NO: 10

```

126 <211> LENGTH: 20

RAW SEQUENCE LISTING

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:14

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

```

127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
132     subunit gene
134 <400> SEQUENCE: 10
135 gcggcgaccg ctacagcgca                                20
137 <210> SEQ ID NO: 11
138 <211> LENGTH: 20
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat
case
144     in kinase 2 subunit gene
146 <400> SEQUENCE: 11
147 ccgcggacat aaagatgagt                                20
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat
case
156     in kinase 2 subunit gene
158 <400> SEQUENCE: 12
159 aaaccagtgc cgaagtatgc                                20
161 <210> SEQ ID NO: 13
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat
case
168     in kinase 2 subunit gene
170 <400> SEQUENCE: 13
171 agaaagcttc ggctaataga                                20
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 20
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat
case
180     in kinase 2 subunit gene
182 <400> SEQUENCE: 14
183 actgaagaaa tccctgacat                                20
185 <210> SEQ ID NO: 15
186 <211> LENGTH: 2178
187 <212> TYPE: DNA
188 <213> ORGANISM: homo sapiens
190 <400> SEQUENCE: 15

```

191 gagcagaggg gagacggccg ccgccctggc cgcttcacc acagtttgaa gaaaacaggt 60

RAW SEQUENCE LISTING

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:14

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

```

193 ctgaaacaag gtcttaccac cagctgcttc tgaacacagt gactgccaga tctccaaaca 120
195 tcaagtccag ctttgtccgc caacctgtct gac atg tcg gga ccc gtg cca agc 174
196 Met Ser Gly Pro Val Pro Ser
197 1 5
199 agg gcc aga gtt tac aca gat gtt aat aca cac aga cct cga gaa tac 222
200 Arg Ala Arg Val Tyr Thr Asp Val Asn Thr His Arg Pro Arg Glu Tyr
201 10 15 20
203 tgg gat tac gag tca cat gtg gtg gaa tgg gga aat caa gat gac tac 270
204 Trp Asp Tyr Glu Ser His Val Val Glu Trp Gly Asn Gln Asp Asp Tyr
205 25 30 35
207 cag ctg gtt cga aaa tta ggc cga ggt aaa tac agt gaa gta ttt gaa 318
208 Gln Leu Val Arg Lys Leu Gly Arg Gly Lys Tyr Ser Glu Val Phe Glu
209 40 45 50 55
211 gcc atc aac atc aca aat aat gaa aaa gtt gtt gtt aaa att ctc aag 366
212 Ala Ile Asn Ile Thr Asn Asn Glu Lys Val Val Val Lys Ile Leu Lys
213 60 65 70
215 cca gta aaa aag aag aaa att aag cgt gaa ata aag att ttg gag aat 414
216 Pro Val Lys Lys Lys Lys Ile Lys Arg Glu Ile Lys Ile Leu Glu Asn
217 75 80 85
219 ttg aga gga ggt ccc aac atc atc aca ctg gca gac att gta aaa gac 462
220 Leu Arg Gly Gly Pro Asn Ile Ile Thr Leu Ala Asp Ile Val Lys Asp
221 90 95 100
223 cct gtg tca cga acc ccc gcc ttg gtt ttt gaa cac gta aac aac aca 510
224 Pro Val Ser Arg Thr Pro Ala Leu Val Phe Glu His Val Asn Asn Thr
225 105 110 115
227 gac ttc aag caa ttg tac cag acg tta aca gac tat gat att cga ttt 558
228 Asp Phe Lys Gln Leu Tyr Gln Thr Leu Thr Asp Tyr Asp Ile Arg Phe
229 120 125 130 135
231 tac atg tat gag att ctg aag gcc ctg gat tat tgt cac agc atg gga 606
232 Tyr Met Tyr Glu Ile Leu Lys Ala Leu Asp Tyr Cys His Ser Met Gly
233 140 145 150
235 att atg cac aga gat gtc aag ccc cat aat gtc atg att gat cat gag 654
236 Ile Met His Arg Asp Val Lys Pro His Asn Val Met Ile Asp His Glu
237 155 160 165
239 cac aga aag cta cga cta ata gac tgg ggt ttg gct gag ttt tat cat 702
240 His Arg Lys Leu Arg Leu Ile Asp Trp Gly Leu Ala Glu Phe Tyr His
241 170 175 180
243 cct ggc caa gaa tat aat gtc cga gtt gct tcc cga tac ttc aaa ggt 750
244 Pro Gly Gln Glu Tyr Asn Val Arg Val Ala Ser Arg Tyr Phe Lys Gly
245 185 190 195
247 cct gag cta ctt gta gac tat cag atg tac gat tat agt ttg gat atg 798
248 Pro Glu Leu Leu Val Asp Tyr Gln Met Tyr Asp Tyr Ser Leu Asp Met
249 200 205 210 215
251 tgg agt ttg ggt tgt atg ctg gca agt atg atc ttt cgg aag gag cca 846
252 Trp Ser Leu Gly Cys Met Leu Ala Ser Met Ile Phe Arg Lys Glu Pro
253 220 225 230
255 ttt ttc cat gga cat gac aat tat gat cag ttg gtg agg ata gcc aag 894
256 Phe Phe His Gly His Asp Asn Tyr Asp Gln Leu Val Arg Ile Ala Lys
257 235 240 245

```


RAW SEQUENCE LISTING

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:14

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

```

259 gtt ctg ggg aca gaa gat tta tat gac tat att gac aaa tac aac att      942
260 Val Leu Gly Thr Glu Asp Leu Tyr Asp Tyr Ile Asp Lys Tyr Asn Ile
261      250      255      260
263 gaa tta gat cca cgt ttc aat gat atc ttg ggc aga cac tct cga aag      990
264 Glu Leu Asp Pro Arg Phe Asn Asp Ile Leu Gly Arg His Ser Arg Lys
265      265      270      275
267 cga tgg gaa cgc ttt gtc cac agt gaa aat cag cac ctt gtc agc cct      1038
268 Arg Trp Glu Arg Phe Val His Ser Glu Asn Gln His Leu Val Ser Pro
269 280      285      290      295
271 gag gcc ttg gat ttc ctg gac aaa ctg ctg cga tat gac cac cag tca      1086
272 Glu Ala Leu Asp Phe Leu Asp Lys Leu Leu Arg Tyr Asp His Gln Ser
273      300      305      310
275 cgg ctt act gca aga gag gca atg gag cac ccc tat ttc tac act gtt      1134
276 Arg Leu Thr Ala Arg Glu Ala Met Glu His Pro Tyr Phe Tyr Thr Val
277      315      320      325
279 gtg aag gac cag gct cga atg ggt tca tct agc atg cca ggg ggc agt      1182
280 Val Lys Asp Gln Ala Arg Met Gly Ser Ser Ser Met Pro Gly Gly Ser
281      330      335      340
283 acg ccc gtc agc agc gcc aat atg atg tca ggg att tct tca gtg cca      1230
284 Thr Pro Val Ser Ser Ala Asn Met Met Ser Gly Ile Ser Ser Val Pro
285      345      350      355
287 acc cct tca ccc ctt gga cct ctg gca ggc tca cca gtg att gct gct      1278
288 Thr Pro Ser Pro Leu Gly Pro Leu Ala Gly Ser Pro Val Ile Ala Ala
289 360      365      370      375
291 gcc aac ccc ctt ggg atg cct gtt cca gct gcc gct ggc gct cag cag      1326
292 Ala Asn Pro Leu Gly Met Pro Val Pro Ala Ala Ala Gly Ala Gln Gln
293      380      385      390
295 taa cgccctatc tgtctcctga tgcctgagca gaggtggggg agtccaccct      1379
297 ctccctgatg cagcttgccg ctggcgggga ggggtgaaac acttcagaag caccgtgtct      1439
299 gaaccgttgc ttgtggattt atagtatttc agtcataaaa aaaaaaatta taataggctg      1499
301 attttctttt ttcttttttt ttttaactga acttttcata actcagggga ttccctgaaa      1559
303 aattacctgc aggtggaata tttcatggac aatttttttt tctccctccc caaatttagt      1619
305 tcctcatcac aaaagaacaa agataaacca gcctcaatcc cggtctgtgc atttaggtgg      1679
307 agactttctt ccattccac cattgttctt ccaccgtccc aacttttagg gggttggtat      1739
309 ctctgtctct tctccagaga ttacaaaaat gtagcttctc aggggaggca ggaagaaagg      1799
311 aaggaaggaa agaaggaagg gaggacccaa tctataggag cagtggactg cttgctggtc      1859
313 gcttacatca ctttactcca taagcgcttc agtgggggta tctagtggc tcttgaggaa      1919
315 gtgtgtctta gttacatcaa gatgttaaaa tctacccaaa atgcagacag atactaaac      1979
317 tctgtcagta gatcatgtct tactgatcta accctaaatc caactcattt atacttttat      2039
319 ttttagttca gtttaaaatg ttgatacctt ccctcccagg ctccctacct tgggtcttttc      2099
321 cctgttcata tcccaacatg ctgtgtctca tagctggtag gagaggggaag gcaaaatctt      2159
323 tcttagtttt ctttatctt      2178
325 <210> SEQ ID NO: 16
326 <211> LENGTH: 1677
327 <212> TYPE: DNA
328 <213> ORGANISM: homo sapiens
330 <400> SEQUENCE: 16
331 tgtcaccag gctggagtgc agtggcgcaa tctcagctca ctgcaacctc cacctccctg      60
333 gttcaagcga ttctctgccc tcctccgccc gacgccccgc gtcccccgcc gcgccgcgcg      120

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/523,689A

DATE: 07/11/2006
TIME: 11:09:15

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt
Output Set: N:\CRF4\07112006\J523689A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; N Pos. 2,13,15
Seq#:21; N Pos. 2,4,10,11,13,17
Seq#:22; N Pos. 2,13,15
Seq#:23; N Pos. 2,4,10,11,13,17
Seq#:24; N Pos. 2,4,5,8,13,17
Seq#:25; N Pos. 3,7,9,10,16,18

VERIFICATION SUMMARY

DATE: 07/11/2006

PATENT APPLICATION: US/10/523,689A

TIME: 11:09:15

Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt

Output Set: N:\CRF4\07112006\J523689A.raw

L:703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0